

## Path Analysis: Health Promotion Information Access of Parent Caretaking Pattern through Parenting Education

Tri Sunarsih<sup>1</sup>, Bhisma Murti<sup>2</sup>, Sapja Anantanyu<sup>3</sup>, Mahendra Wijaya<sup>4</sup>

<sup>1</sup>General Ahmad Yani Health Science College, Yogyakarta, Indonesia

<sup>2</sup>Medicine Faculty of Sebelas Maret University, Indonesia

<sup>3</sup>Social Politic Faculty of Sebelas Maret University, Indonesia

<sup>4</sup>Doctoral Program of Sebelas Maret University, Indonesia

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### ABSTRACT

Parents often inhibit learning process organized by education, due to their ignorance about how to educate child well. Incapability of dealing with those changes leads to dysfunctional families, and problematic children. This research aimed: to analyzed the health promotion information access pattern of parent caretaking pattern through parenting education. This study was taken place in Karanganyar Regency area, Central Java. As a survey research with cross-sectional design, this study built on questionnaire as a main instrument of collecting primary data, while secondary data was obtained from recording in the related institutions in Karanganyar Regency. The sample consisted of 108 parents, taken using purposive sampling technique. To address the objective, multiple linear regression and path analyses were used. Its important finding was that interactions with other students' parent, with other members of family, and with media simultaneously affected significantly the parenting pattern holistically, either directly or indirectly. The largest effect on parenting was exerted by interaction between parent and media. From those findings, the author recommended that the appropriate parenting education strategies were to provide adequate information such as reading books for parent, to facilitate parent discussion to generate interaction between parents so that they shared information more frequently.

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### Corresponding Author:

Tri Sunarsih,  
Midwifery Study Program,  
General Ahmad Yani Health Science College, Yogyakarta, Indonesia.  
Email: are\_she79@yahoo.com

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### 1. INTRODUCTION

The main pillar of a nation's advance is highly determined by its human resource, the one with tough physique, strong mental, and first-rate health in addition to high intelligence level, and spiritual and emotional maturity. The first-years development, i.e. from fetal to six-year age, really determines the quality of HR (human resource). This period is critical period for brain development, because in this period the brain of under-five age children is more plastic. At that time there is a dramatic jump in children development not occurring in the next period. The scholars called it "golden ages" or "window of opportunity" [1].

Prolonged economic crisis and total reforming wave lead many women to work out of home. Children become lonely because they are left alone, taken care by others, watching TV too much, playing video, or online game [2]. It results in less attention paid to children, so that they get freedom in early age. However, this freedom is not equipped with how to use the freedom wisely. Thus, deficit occurs in informal education (education in family environment). Formal education (school) and informal education (family) in fact contribute less to building predisposition, personality, and character [3].

Parents often inhibit learning process organized by education, due to their ignorance about how to educate child well. Incapability of dealing with those changes leads to dysfunctional families, and problematic children. The implementation of technocratic education program is not merely that the school can be run through non-formal and informal education channels. The program promoted currently is parenting education to confirm the parent's and family's role in informal education.

Parenting education is evidently strategic [4]. Parenting education is one of most important factors to affect the child's achievement and motivation [5]. Parenting education program has shown that the improved quality of several interactions [6], competency and stress caretaking [7],[8] and depressed mother [9] affected significantly and positively the self-efficacy academic achievement and motivation [10]. These programs have been delivered in various formats including large group [11], small group [12], individual guiding/consultation [9], self-managed [13], or as television program [14].

The fact shows that parenting education program gets less public participation, particularly parent with early age children because of limited information given concerning its objective, benefit and implementation. On the other hand, the community's awareness of the importance of parent caretaking pattern is still low. For that reason, health promotion effort is required, because it is the attempt of improving the community's ability through the learning process, from, by, for, and along with members of community to enable them to help themselves and to develop community-based activity corresponding to local social-cultural condition [15]. The objective of research was to find out the health promotion information accessing pattern of parent caretaking pattern through parenting education.

## 2. RESEARCH METHODS

Considering the objective of research, the type of research employed was quantitative one with explanatory study. Qualitative data-based information was used to support and to sharpen the analysis [16]. The implementation of research was conducted using survey method with cross-sectional approach. This study was taken place in an Integrative Holistic Early Age Child Education (*PAUD Holistik Integratif*) synergizing Pos PAUD, BKB, and Posyandu in five selected locations: 1) PAUD NakitaWetan Kali, GirilayuMatesih; 2) PAUD KasihBundaPanjang, Sepanjang, Tawangmangu; 3) PAUD MawarPutihKranean, Ngeblak, Tawangmangu; 4) PAUD AmanahDagen, Dagen, Jaten; 5) PAUD SeruniSehat, Jeruk Street 03 Ngringo, Jaten.

The population of research consisted of the parents of early-age children attending in one-stop Integrative Holistic Early Age Child Education (*PAUD Holistik Integratif satuatap*) consisting of 108 persons. The sampling technique used was purposive sampling one. Techniques of collecting data used were questionnaire, in-depth interview, documentation study, and observation. In this study, the data analysis was carried out using multiple linear regression and path analyses. The data was converted first using Successive Interval Method (SIM) and tested using parametric assumption, including normality, linearity, multicollinearity, and heteroskedasticity, thereby yielding BLUE (Best Linear Unbiased Estimator)

## 3. RESULTS AND ANALYSIS

Access of parent caretaking pattern through parenting education in this study was measured from three aspects, namely: (1) interaction with other parents; (2) interaction with other family members; and (3) interaction with the media with a number of questions as much as 11 grains. The number of respondents is 108 parents whose children follow in one-stop Integrative Holistic Early Age Child Education. Access of parent caretaking pattern through parenting education can be seen in the following description.

### 3.1. Result of Analysis

Access of parent caretaking pattern through parenting education contribute significantly to holistic parenting parent either direct and indirect effects parent caretaking pattern through parenting education. The hypothesis is solved by multiple linear regression analysis and path analysis. The result of multiple linear regression analysis was presented briefly in the Table 1.

Considering the regression analysis summarized in the Table 1, it can be found the multiple-correlation coefficient (R) of 0.72 and determination coefficient ( $R^2$ ) of 0.517 and  $F_{\text{regression}}$  of 56.260 with  $p < 0.05$ , in fact  $p < 0.05$ . It proved that there was a significant effect of information access and health promotion process through parenting education simultaneously on the holistic children caretaking pattern. Subsequent analysis was path one, as illustrated in the form of graph as shown in Figure 1.

Table 1. Result of Regression on the effect of information access and health promotion process through parenting education on holistically children caretaking pattern

Independent Variable	Regression	Standardized Coefficients Beta	T	P
Constant	1.51	--	--	--
Information Access ( $X_2$ )	0.22	0.29	3.63	0.000 <sup>*</sup>
Role of stakeholders ( $X_5$ )	0.38	0.54	7.09	0.000 <sup>*</sup>
R		= 0.72		
Adjusted R Square		= 0.51		
p		< 0.001		

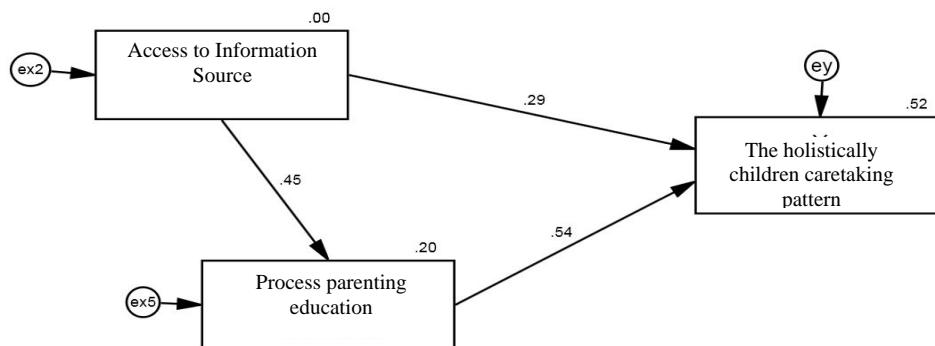


Figure 1. Path analysis model of the effect of information access on the holistically children caretaking pattern

Considering the result of analysis, direct and indirect effects of individual exogenous (independent) variables on endogenous (dependent) ones can be presented in the Table 2.

Table 2. Direct and indirect effect of information source access on the holistically children caretaking pattern

Endogenous/ dependent variables	Exogenous/independent variables	Effect (%)		
		Direct	Indirect	Total
Health promotion process through parenting education	Access to Information Source	45.2	--	45.2
The holistically children caretaking pattern	Access to Information Source	29.1	24.4	53.5
	Health promotion process through parenting education	53.9	--	53.9

The Table 2 reveals that the direct effect of information source access on the holistically children caretaking pattern in Integrative Holistic Early Age Child Education of Karanganyar Regency is 29.1%; while the indirect effect is 24.4% via health promotion process through parenting education.

The result of analysis indicated that access to information source contributes significantly to the holistically children caretaking pattern both directly and indirectly through health promotion with parenting education in Integrative Holistic Early Age Child Education of Karanganyar Regency. Thus, the sixth minor hypothesis in this study was supported.

To get more comprehensive representation, the following is presented the result of direct and indirect analysis on each aspect of information source access variable.

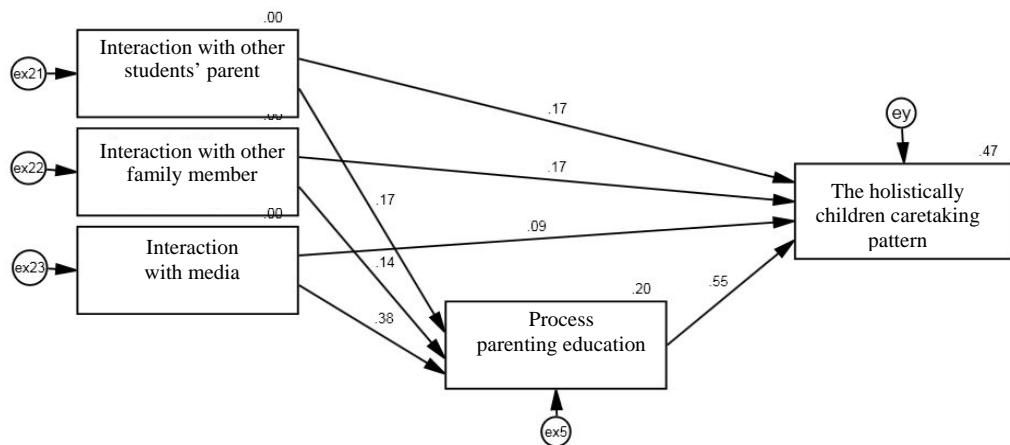


Figure 2. Path analysis model of the effect of information source access aspects on the holistically children caretaking pattern

Considering the result of analysis, direct and indirect effects of individual exogenous (independent) variables on endogenous (dependent ones can be presented in the Table 3.

Table 3. Direct and indirect effect of the aspects of access to information on the holistically children caretaking pattern

Endogenous/dependent variables	Exogenous/independent variables	Effect (%)			Total
		Direct	Indirect Effect		
Health promotion process through parenting education	Interaction with other students' parents	17.4	--		17.4
The holistically children caretaking pattern	Interaction with other members of family	13.6	--		13.6
Interaction with media	Interaction with media	38.4	--		38.4
Health promotion process through parenting education	Interaction with other students' parents	17.0	9.6		26.6
	Interaction with other members of family	17.4	7.4		24.8
	Interaction with media	9.2	21.1		30.3
	Health promotion process through parenting education	55.0	--		55.0

The Table 3 reveals that the direct effect of interaction with other students' parents on the holistically children caretaking pattern in Integrative Holistic Early Age Child Education of Karanganyar Regency was 17.0%; while the indirect effect via health promotion process through parenting education was 9.6%. The direct effect of interaction with other members of family on the holistically children caretaking pattern in Integrative Holistic Early Age Child Education of Karanganyar Regency was 17.4%; while the indirect effect via health promotion process through parenting education was 7.4%. The direct effect of interaction with media on the holistically children caretaking pattern in Integrative Holistic Early Age Child Education of Karanganyar Regency was 9.2%; while the indirect effect via health promotion process through parenting education was 21.1%.

The result of analysis indicates that interactions with other students' parents, with other members of family, and with media contribute significantly to the holistically children caretaking pattern both directly and indirectly via a health promotion process through parenting education in Integrative Holistic Early Age Child Education of Karanganyar Regency.

### 3.2. Discussion

This study demonstrated that was conducted using survey method to parents of early-age children attending in one-stop Integrative Holistic Early Age Child Education. These findings support and extend previous research that has demonstrated that intervention strategies relying on parental self-regulation [17], [18] can be effective in reducing child behavioral problems.

Considering the result of analysis, it can be found that the direct effect of information source access on the holistically children caretaking pattern in Integrative Holistic Early Age Child Education of Karanganyar Regency is 29.1%; while the indirect effect is 24.4% via health promotion process through

parenting education. Thus it can be concluded that there is a significant positive effect of access-to-information factor on the holistically children caretaking pattern in Integrative Holistic Early Age Child Education of Karanganyar Regency. It indicates that parent caretaking pattern is determined with access to information source. In other words, the amount of information obtained will affect the parent caretaking pattern. Access to information source is explained through three predictor sub variables: interaction with other students' parents, interaction with other members of family, and interaction with media.

The closest source of information to parents is other members of family, because of their familiarity, intimacy, and similar point of view on a problem. The result of research shows that interaction with other members of family both directly (17.4%) and indirectly (7.4%) via health promotion process through parenting education affected the holistically children caretaking pattern in Integrative Holistic Early Age Child Education of Karanganyar Regency. Interaction with other members of family is explained through something the parents talking about during waiting for their children and the compatibility of information to the parents' need, information benefit, information accessibility, and face-to-face quality.

Indonesian kinship system is generally that parents still reside in their parents' house. Thus, nuclear family consists of multi-generations (grand-mothering), grandfathering and sometimes sistering or bothering, and the household assistant use creates informal learning process as well for the children [19]. Generally grandfather and grandmother will pay more attention to their grandchildren and instead they did not take their grandchildren's development into account. For that reasons, shared understanding on information and shared children caretaking are very crucial.

Considering the observation in the field, it can be seen that a father pays less attention to his children's development, even they seem to be uncared-for it. It affects the members of family's shared understanding on children caretaking. It indicates that despite daily encounter, the members of family talk more about other matters than their children development. However, parents will find social help and support to their caretaking pattern [20],[21].

Theoretically, another factor affecting the parents' caretaking pattern is others' participation [22], i.e. group support from other students' parents [23] by conducting interpersonal exchange [24] be means of providing information [23]. The result of analysis reveals that the direct effect (17.0%) of interaction with other students' parents on caretaking pattern is larger than the indirect one (9.6%) through parenting education. It indicates that the quantity and the quality of meeting between student parents are still inadequate. When meeting other students' parents, they talk more about domestic issues than their child development. The intensity of meeting effective to talk about children caretaking pattern and growth – parenting education – is still very low; it is organized only once a month or even two or three months.

However, the fact shows that interaction with other students' parents affect the parents' caretaking pattern. It indicates that they are a part of other students' parent group, in which they are sharing each other. The parents successfully educate their children will be information resource for other parents because of their familiarity, intimacy, and similar point of view on a problem [25]. [26] Identified some situations when parents can benefit from being the participants of parenting training. What the parents mostly appreciate in participating in the training is support they get from being between other parents and the opportunity of being themselves in environment that can accept them as the way they are. The fact that the difficulty they encounter is not only theirs but also makes them stronger by respecting, caring for and supporting each other [27].

Another information source for parents is mass media existing and accessible to parents. The mass media plays an important role in providing health information for the general public [28], and television acts as the primary source of mass media in today's society. Television has been shown to have the capacity to influence awareness and to change attitudes, beliefs, and behaviors, making it potentially one of the most powerful educational resources available at the present time [29],[30]. Mass media in this study has both direct (9.2%) and indirect (21.1%) effects via health promotion process through parenting education. Despite small size, this figure has larger effect than that of interaction with other students' parents and interaction with other members of family. Media can play an important part in improving parents' awareness of and willingness to attend the caretaking program [13] and proves effectively changing the caretaking practice [31]. In addition, through an intervention-based technology most populations are possible to reach with very low cost [32].

Suggested that mass media, including TV, has either positive or negative aspect [29]. Most parents have electronic media such as television at home, but it largely functions as entertainment medium. But, some parents can take positive aspect from such the media, by watching kid programs despite small number, so that they can learn about children caretaking pattern from the program. Intervention through television proves effectively changing caretaking practice [33] and phone consultation is more flexible as well [17]. Television can be seen to have a pervasive influence on families. Australian adults watch approximately 3 hours of television per day [34]. Televised parent education program could promote and increase community

awareness of effective parenting strategies and understanding of the role family relationships play in the health and wellbeing of young children. Media interventions of this type have the capacity to create a social milieu that is supportive of parent education and family change, which could be used to counter alarmist, sensationalized, or parent-blaming messages. An added advantage of a television-based parent education program is that any behavioral change achieved by watching the program is likely to be attributed to one's own efforts, thus increasing parent's feelings of personal competence [35], [14]. There is improved availability of mobile internet access but parents still rarely utilize it.

#### 4. CONCLUSION AND RECOMMENDATION

Considering the result of data analysis and discussion, it can be concluded that interactions with other students' parent, with other members of family, and with media simultaneously affect significantly the parenting pattern holistically, either directly or indirectly. The largest effect on parenting is exerted by interaction between parent and media. From those findings, the author recommends that the appropriate parenting education strategies are to provide adequate information such as reading books for parent, to facilitate parent discussion to generate interaction between parents so that they shared information more frequently.

#### REFERENCES

- [1] HealthDepartementthe Republic ofIndonesia, "National Policy of Health Promotion", Jakarta, 2005.
- [2] Sindhunata, "BeingGenerationPost-Indonesia: AnxietyYB. Mangunwijaya", Yogyakarta, Kanisius, 2003.
- [3] Mursitho, "The Lost National Character", National Center for Education And Training Departement, Kompasiana, 2014.
- [4] Sanders, MR., "Triple P-Positive Parenting Program as A public Health Approach to Strengthening Parenting", *Journal of Family Psychology*, vol/issue: 22(4), pp. 506–517, 2008.
- [5] Selvam, SKP., "A Study On Relationship Between Parental Education And Student Achievement", *Education Research Journal*, vol/issue: 3(3), pp. 75- 82, 2013.
- [6] Cowan, C., Cowan, P., Barry, J., "Couples' Groups for Parents of Preschoolers: Ten-Year Outcomes Of A Randomized Trial", *Journal of Family Psychology*, vol/issue: 25(2), pp. 240–250, 2011.
- [7] Gross, D., Fogg, L., Webster-Stratton, C., Garvey, C., Julion, W., Grady, J., "Parent Training Of Toddlers In Day Care In LowincomeUrban Communities", *Journal of Consulting and Clinical Psychology*, vol/issue: 71(2), pp. 261–278, 2003.
- [8] Nixon, RDV., Sweeney, L., Erickson, DB., Touyz, SW., "Parent-Child Interaction Therapy: A Comparison Of Standard And Abbreviated Treatments For Oppositional Defiant Preschoolers", *Journal of Consulting and Clinical Psychology*, vol/issue: 71(2), pp. 251–260, 2003.
- [9] Sanders, MR., McFarland, M., "The Treatment of Depressed Mothers with Disruptive Children: A Controlled Evaluation of Cognitive Behavioral Family Intervention", *Behavior Therapy*, vol/issue: 31(1), pp. 89–112, 2000.
- [10] Abesha, AG., "Effects Of Parenting Styles, Academic Self-Efficacy, And Achievement Motivation On The Academic Achievement Of University Students In Ehtiopia", Dissertation Of University Of California, Los Angeles, 2012.
- [11] Sanders, MR., Prior, J., Ralph, A., "An Evaluation of A Brief Universal Seminar Series on Positive Parenting: A Feasibility Study", *Journal of Children's Services*, vol/issue: 4(1), pp. 4–20, 2009.
- [12] Hoath, F., Sanders, MR., "A Feasibility Study Of Enhanced Group Triple P-Positive Parenting Program for Parents of Children with Attention Deficit/Hyperactivity Disorder", *Behaviour Change*, vol/issue: 19(4), pp. 191–206, 2002.
- [13] Morawska, A., Sanders, MR., "Self-Administered Behavioral Family Intervention for Parents of Toddlers: Part I. Efficacy", *Journal of Consulting and Clinical Psychology*, vol/issue: 74(1), pp. 10–19, 2006.
- [14] Sanders, MR., Markie-Dadds, C., Tully, L., Bor, W., "The Triple P- Positive Parenting Program: A Comparison of Enhanced, Standard, and Self Directed Behavioral Family Intervention for Parents Of Children With Early Onset Conduct Problems", *Journal of Consulting and Clinical Psychology*, vol. 68, pp. 624–640, 2000.
- [15] HealthDepartementthe Republic ofIndonesia, "Guidelines forHealth Promotionin the Regions", Jakarta, 2006.
- [16] Brannen, J., "MixingQualitative andQuantitativeResearch Methods", Yogyakarta, PustakaPelajar, 2002.
- [17] Connell, S., Sanders, MR., Markie-Dadds, C., "SelfdirectedBehavioral Family Intervention for Parentof Oppositional Children in Rural and Remote Areas", *Behavior Modification*, vol. 21, pp. 379–408, 1997.
- [18] Webster-Stratton, C., "Advancing Videotape Parent Training: A comparison study", *Journal of Consulting and Clinical Psychology*, vol. 62, pp. 583-593, 1994.
- [19] Syakrani, "Family-Based Human Resources Development: AssessingDetrimentalEffectPattern"parenting" Parents AgainstUnfairCharacterDeficitinChildren", Dissertation, University AgriculturalProgramin Bogor, Bogor, 2004.
- [20] Lim, I., "Poverty And Maternal Child Maltreatment: The Mediating Roles Of Psychological Distress And Social Support", *Dissertation Abstracts International Section A: Humanities and Social Sciences*, vol/issue: 71(10a), pp. 3793, 2011.

- [21] Taylor, S., "Impact of Maternal and Family Factors on Behavior Problems in African-American Children Living in Urban Poverty", *Dissertation Abstracts International: Section B: The Sciences and Engineering*, vol/issue: 57(5b), pp. 3455, 1996.
- [22] Unicef, "Improving Family And Community Practices: A Component Of The IMCI Strategy", 1998.
- [23] Sarafino, EP., "Health Psychology: Biopsychosocial Interaction (5<sup>th</sup> Edition)", New York, McGraw-Hill Inc Boston, 2006.
- [24] Di Matteo, MR., "The Psychology of Health, Illness, and Medical Care", Pasific Grove, California, Brooks / Cole Publishing Company, 1991.
- [25] Tjitrajanoto, P., "Understanding the Concept of Self, Potential/ReadinessSelf, AndIntroduction toInnovation", *JurnalPenyuluhan*, vol/issue: 1(1), 2005. ISSN: 1858-2664.
- [26] Barlow, J., Stewart-Brown, S., "Review Article: Behavior Problems and Parent Training Programs", *Journal of Development and BehavioralPediatrics*, vol. 21, pp. 356-370, 2000.
- [27] Harkavy, I., Goodman, JF., Sutton, V., "The Effectiveness Of Family Workshops In A Middle School Setting: Respect And Caring Make The Difference", *Phi Delta Kappan*, vol/issue: 76(9), pp. 694-700, 1995.
- [28] Egger, G., Donovan, R., Spark, R., "Health and the Media", Sydney, McGraw-Hill Book Company, 1993.
- [29] Burke, R., Herron, R., "Ways of Raising ChildrenWith Emotional Intelligence Leveraging", Batam, Interaksara, 2004.
- [30] Zimmerman, JD., "A prosocial media strategy: Youth against violence: Choose to de-fuse", *American Journal of Orthopsychiatry*, vol. 66, pp. 354-361, 1996.
- [31] Sanders, MR., Montgomery, DT., Brechman-Toussaint, M., "The Mass Media andthe Prevention of Child Behavior Problems: The Evaluation of a Television Series to Promote Positive Outcomes for Parents andtheir Children", *Journal of Child Psychology and Psychiatry*, vol/issue: 41(7), pp. 939-948, 2000.
- [32] Munoz, R., "Using Evidence-Based Internet Interventions to Reduce Health Disparities Worldwide", *Journal of Medical Internet Research*, vol/issue: 12(5), pp. e60, 2010.
- [33] Sanders, MR., Montgomery, D., Brechman-Toussaint, M., "The Mass Media andthe Preventionof Child Behavior Problems: The Evaluation of a Television Series to Promote Positive Outcomesfor Parents and Their Children", *Journal of Child Psychology and Psychiatry*, vol/issue: 41(7), pp. 939-948, 2000.
- [34] Nielson, AC., "Average Amount Of Time Spent Exposed To Television By Age Group", Sydney, Author, 1998.
- [35] Flay, BR., "Mass Media And Smoking Cessation: A Critical Review", *American Journal of Public Health*, vol. 77, pp. 153-160, 1987.